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A New Venezuelan Ambrysus (Hemiptera: Naucoridae)

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Subfamily Ambrysinae Usinger, 1941 Genus Ambrysus Stal, 1862

Ambrysus maldonadus sp. nov.

General appearance: A rather "square" species when superficially compared with the remainder of the genus. Size 10.5–11.0 mm. long and 6.75–7.0 mm. wide. Dorsum nearly unicolorous, somewhat lighter anteriorly, yellowish brown, embolia distinctly lighter than background color along outer edges, scutellum reddish-brown. Venter, particularly abdomen, lighter yellow than back, legs bright yellow.

Head: Prominently punctate, shiny; comparatively broad due to shallow concavity for reception of head into anterior margin of pronotum; vertex scarcely and only broadly protuberant before eyes, a prominent tuberculation on each side adjacent to anterior eye corner. Eyes slightly elevated above general head surface; viewed from above, outer and posterior eye edges forming a smooth, uninterrupted semicircle, the thin border along the posterior surface being only suggestively angulate at juncture between the two sides. Labrum rather weakly rounded along lower edge, ratio of length-to-width 26::50 (52%), uniform in color; mouth-parts similar to head in color. Head ratios are

- (1) total length to width (including eyes) 40::67 (60%)
- (2) anterior distance between eyes to posterior distance 28::34 (82%)
- (3) anterior distance between eyes to inner eye length 28::30 (90%)
- (4) posterior distance between eyes to greatest length of head posterior to this line 34::8 (24%).

Pronotum: Punctate-glistening, generally light brownish in background color, with yellowish-white around borders; two conspicuous thin black lines each about midway between center and lateral edge of its side, the lines curved slightly outward and unattached either fore or aft; thin blackish line producing a rather wide posterior border to pronotum, with large punctures spaced along posterior border of thin black line, punctures obsolescent along mid-line; lateral pronotal edges smooth, curved, curvature more pronounced at hind angle (postero-lateral angle), per cent of curvature (viewed perpendicularly to the frontal plane of section) about 18 (av. 66::12); venter dark brownish centrally and posteriorly, light yellow laterally, some pilosity along posterior edge and concentrated about median anterior keel; keel ridged its entire length, including posterior sloping face, which latter is the shortest portion of keel, ratio of anterior keel ridge to total keel length (including posterior sloping face), 55::80 (69%); prosternum fused with propleura, the point of union being nowhere a plane surface, the circular juncture at posterior sloping edge of keel being a marked depression, the juncture laterad of this being a raised keel. Pronotal ratios are

- (1) width between anterior angles to width between posterior angles 65::130 (50%)
- (2) median length to greatest width 47::130 (36%)
- (3) distance between anterior and posterior angles on same side to perpendicular distance between anterior angle and baseline of pronotum 65::63.

Scutellum: More or less unicolorous, noticeably redder than pronotum in groundcolor with faint lightening in color laterally; ratio of three sides, anterior and two laterals, 96::70::69.

Hemelytra: Unicolorous deep brownish-red except for lighter areas in embolia, shiny, punctate, each puncture with a whitish spot; embolium well defined at its posterior edge in contrast to many Ambrysi in which the caudal emboliar limitations are obscure, long and narrow, length-to-width 68::20 (29%); emboliar crease pronounced anteriorly, very close to inner emboliar margin, beginning about midway and extending to anterior edge, embolium bicolored, light yellow in anterior two-thirds, reddish-brown posteriorly but without any abrupt contrast between the two. Hemelytra moderately exposing connexival lateral non-spinose edges posterior to embolia, and attaining abdominal tip. Wings functional, as long as hemelytra, and possessing a large "costal" cell.

Venter: The prothoracic venter has been discussed above. Emboliar venter lighter in color than thoracic venter. Connexival segments completely non-spinose, the angles of each segment being inconspicuously acute-angulate, each angle pressed closely to anterior corner of succeeding abdominal segment so as to give an almost smooth line to the general lateral contour, the slight depressions at these junctions are visible only with some moderate magnification; lateral connexival edges everywhere completely smooth under high magnification, lacking any suggestions of serration or dentation; connexival lateral curvature weak, no sudden inward dip of the edge in the shadow of the adjoining segment's angle; both sexes lacking the hydrofuge pelt on the medial posterior three-fourths of the abdomen, the bare, glistening surface beginning at anterior edge of segment IV and expanding caudad into a long, narrow wedge including the accessory genital structures; female subgenital plate consisting of a large, conspicuous, rounded medial process flanked by small, depressed lateral angles, the medial process extending considerably caudad of the side angles (see illustration); the outline of this subgenital plate is distinctive enough to segregate this species from any other Ambrysus; male genital process absent, represented only by a rounded angle, and with two distinctive, rather elongate blackish processes lying as indicated in the accompanying illustration. These processes are tentatively referred to as "procts." ¹

Legs. Forelegs: coxa and trochanter usual for the genus.² Femora swollen somewhat more than is normal for the genus, ratio of length to greatest median width is 64::50 (78%); tibia normal, combined tibia-tarsus, when closed, slightly overlapping adjacent (proximal) end of femur.

Midlegs: coxa and trochanter usual for the genus; femora rather robust, ratio of length to greatest median width 60::15 (25%), length 2.8 mm.; tibia with usual spination for the subgenus Ambrysus,³ distal end ventrally with two prominent transverse rows of spines set across width of tibia, the terminal row set solidly across tibial apex, and composed of blunt spines unevenly decreasing in size outwardly, the secondary or proximal row not quite extending the tibial width and composed of similar blunt spines progressively and rather evenly decreasing in size outwardly, ratio of length to median ventral width 135::15 (11%), length 2.2 mm.; tarsus long, narrow, yellow, 3-segmented, first segment larger than usual although the smallest of the three segments, typically elongated beneath second segment, third segment the longest, terminating in two moderately curved claws somewhat swollen at bases.

Hindlegs: coxa and trochanter usual for the genus; femora rather robust, ratio of femoral length to median width 68::17 (25%), length 3.0 mm.; tibia essentially an enlargement of mesotibia, although comparatively more elongate, ratio of length

¹ The relative proportions of these processes have not been discussed in any of my previous papers on Ambrysi, but an examination of other species of *Ambrysus* incident to describing *A. maldonadus* showed these structures to be quite varied in form in the genus. For the most part, as far as the remainder of the genus is concerned, these "procts" seem of relatively minor importance compared to the male genital processes as means of establishing species lines, but may, from the example provided by the new species, be expected to be occasionally valuable units of species measurement.

² For a generic summation of leg structures, which are remarkably similar in general aspect for the group as a whole, see pp. 290-291 in La Rivers, 1951A, Univ. Cal. Publ. Ent. 8: 277-338.

³ LA RIVERS, 1951A: 290-291 for details.

to median ventral width 68::6 (9%), length 3.4 mm.; tarsus an enlargement of mesotarsus, and more conspicuously spined beneath with large, sparse bristles.

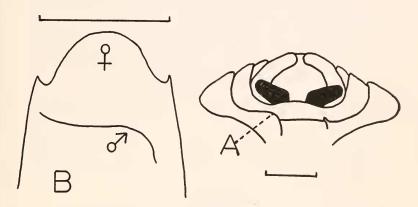


Fig. 1. Showing the diagnostic genitalic accessory structures of Ambrysus maldonadus. A. A general dorsal view of the specialized abdominal tip of the male, showing the conspicuous black "procts"; the dashed line originating at "A" terminates at the point usually bearing the male genital process. B. View of the female subgenital plate tip (venter) and an enlargement below of the smoothly rounded, non-process-bearing edge of the male. Drawn from the types. Lines indicate 1 millimeter.

Distribution: see types.

Type locality data: Venezuela—Territorio Amazonas: Mount Marahuaca (Upper Cunucunuma River), 27(v)50, el. approx. 4,000 ft.—J. Maldonado C. (Collected during an expedition sponsored by the University of Puerto Rico.)

Location of types and etymology: Holotypic male and allotype in the collection of the writer, Reno, Nevada; two paratypes (male and female) in the collection of J. Maldonado Capriles, to whom the species is dedicated.

Comparative data: Ambrysus maldonadus will form an additional monotypic group, differentiated by its distinctive "procts" and especially by the structure of the accessory genitalic structures, particularly those of the female. It will segregate in the following manner from all other Ambrysi known to me:

- - Prosternum free from propleura.. (remainder of subgenus)
 Female subgenital plate rounded at tip with a small sharp angle flanking the rounded central tip on each side; male lacking a genital process, and possessing the large, conspicuous, black "procts" (see illustrations)......

— Without the above combination of characters (while other Ambrysi with fused propleura-prosternum may lack the genital process in the male, the shape of the tip of the female subgenital plate is entirely distinctive in A. maldonadus, as is the prominence of the "procts")... (remaining species)

Obituary

Dr. Malcolm Burr, Fellow of the Royal Entomological Society of London and long a Corresponding Member of the American Entomological Society, distinguished author of "The Insect Legion," and also known for his comprehensive and basic studies of the Dermaptera, and of various groups of the Orthoptera, was struck and killed by a motor lorry July 13, 1954, in Istanbul, Turkey. A sketch of Dr. Burr's life and work will appear in an early number of "Entomological News."

Gift of Lepidoptera to American Museum

The J. B. Smith and G. D. Hulst Lepidoptera Collections, containing more than 32,000 specimens, including almost 6,000 species and 1,171 holotypes, has been given to the American Museum of Natural History, New York, by Rutgers University. This valuable collection of North American moths is especially noteworthy for its noctuids and geometrids.

In announcing this gift, Dr. Mont Cazier of the Museum's Department of Insects and Spiders stated that it represents an example of inter-institutional co-operation resulting in ultimate benefit to science as a whole. He credited the co-operation of Dr. Bailey B. Pepper, Chairman of the Department of Entomology at the New Jersey Agricultural Experiment Station of